Center for Health, Environment and Justice
Citizens' Environmental Coalition
Coalition on West Valley Nuclear Wastes
Indigenous Women's Initiatives
Nuclear Information and Resource Service

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Re: Process for Phase I studies

Dear Independent Scientific Panel Members and Directors Bryan Bower and Paul Bembia,

The process for deciding on studies necessary for supporting Phase 2 clean-up decisions at the West Valley site is incredibly important. The Environmental Impact Statement (EIS) supporting Phased Decision-making failed to describe both the studies and a proposed process. As a result the public was blindfolded and prevented from having any real knowledge about Phase 1 studies at that time. We were told that this would be corrected after the Final EIS was issued. Unfortunately to a large extent the public continues to be hampered in our ability to understand the process and have any meaningful role.

Critical decisions regarding public health and safety are associated with adequate site characterization and the hazards posed by the wastes present. Site characterization enables the next steps, particularly risk characterization which will guide appropriate action to clean-up the site.

The National Academy of Sciences book, ***Understanding Risk: Informing Decisions in a Democratic Society, National Research Council, Committee on Risk Characterization, Stern & Fineberg editors, 1996,*** is particularly relevant to the major problem we are facing related to meaningful public participation in Phase 1 studies, so that appropriate clean-up decisions can be made for Phase 2. Italics reflect direct quotes from this book.

> *Risk characterization involves complex, value-laden judgments and a need for effective dialogue between technical experts and interested and affected citizens who may lack technical expertise, yet have essential information and often hold strong views and substantial power in our democratic society. p. 11*

> ***Recognizing All Significant Concerns***
> *The people who participate in risk decisions—public officials, experts in risk analysis, and interested and affected parties—may be concerned with a variety of possible harms or losses. Sometimes, risks to social, ethical, or ecological values are at least as important as risks to health and safety. The analysis that will be the basis for a risk characterization must pay explicit attention to the breadth of the significant issues. This is often best done by involving the spectrum of decision participants explicitly in formulating the problem to be analyzed. p. 19*

> ***A Decision-Driven Activity***
> *It is not sufficient to get the science right; an informed decision also requires getting the right science, that is, directing the scientific effort to the issues most pertinent to the decision.*
>
> *Risk characterization must be seen as an integral part of the entire process of risk decision making: what is needed for successful characterization of risk must be considered at the very beginning of the process and must to a great extent drive*

risk analysis. If a risk characterization is to fulfill its purpose, it must (1) be decision driven, (2) recognize all significant concerns, (3) reflect both analysis and deliberation, with appropriate input from the interested and affected parties, and (4) be appropriate to the decision. p. 16

What are the decisions being used to direct the scientific effort at West Valley? The NAS report also talks about these decisions as problem formulations. The Agencies seem to believe that science should be conducted in separate closed meetings with little public input. The current process does not recognize all significant concerns and while it can be geared to scientific analysis it does not provide for adequate deliberation from interested and affected parties. To get the right science, the right questions have to be asked. This is not an easy and straightforward task and excluding public involvement will likely lead to getting it wrong.

An Analytic-Deliberative Process
Improving risk characterization requires attention to two discrete but linked processes: analysis and deliberation. Analysis uses rigorous, replicable methods developed by experts to arrive at answers to factual questions. Deliberation uses processes such as discussion, reflection, and persuasion to communicate, raise and collectively consider issues, increase understanding, and arrive at substantive decisions. Deliberation frames analysis and analysis informs deliberation. Thus, risk characterization is the output of a recursive process, not a linear one. Analysis brings new information into the process; deliberation brings new insights, questions, and problem formulations; and the two build on each other. The analytic-deliberative process needs input from the spectrum of interested and affected parties. p.20

The National Academy appears to indicate that there can be no analytic-deliberative process without input from interested and affected parties.

Summary
Structuring an effective analytic-deliberative process for informing a risk decision is not a matter for a recipe. Every step involves judgment, and the right choices are situation dependent. Still, it is possible to identify objectives that also serve as criteria for judging success:

- ***Getting the science right:*** *The underlying analysis meets high scientific standards in terms of measurement, analytic methods, data bases used, plausibility of assumptions, and respectfulness of both the magnitude and the character of uncertainty, taking into consideration limitations that may have been placed on the analysis because of the level of effort judged appropriate for informing the decision.*
- ***Getting the right science:*** *The analysis has addressed the significant risk-related concerns of public officials and the spectrum of interested and affected parties, such as risks to health, economic well-being, and ecological and social values, with analytic priorities having been set so as to emphasize the issues most relevant to the decision.*
- ***Getting the right participation:*** *The analytic-deliberative process has had sufficiently broad participation to ensure that the important, decision-relevant information enters the process, that all important perspectives are considered, and that the parties' legitimate concerns about inclusiveness and openness are met.*

• ***Getting the participation right:*** *The analytic-deliberative process satisfies the decision makers and interested and affected parties that it is responsive to their needs: that their information, viewpoints, and concerns have been adequately represented and taken into account; that they have been adequately consulted; and that their participation has been able to affect the way risk problems are defined and understood.*
• ***Developing an accurate, balanced, and informative synthesis:*** *The risk characterization presents the state of knowledge, uncertainty, and disagreement about the risk situation to reflect the range of relevant knowledge and perspectives and satisfies the parties to a decision that they have been adequately informed within the limits of available knowledge. An accurate and balanced synthesis treats the limits of scientific knowledge (i.e., the various kinds of uncertainty, indeterminacy, and ignorance) with an appropriate mixture of analytic and deliberative techniques.*

These criteria are related. To be decision-relevant, risk characterization must be accurate, balanced, and informative. This requires getting the science right and getting the right science. Participation helps ask the right questions of the science, check the plausibility of assumptions, and ensure that any synthesis is both balanced and informative. p. 6-7

The Agencies have emphasized the need for and value of scientists in particular fields. While we have been provided an opportunity to recommend experts, the process so far is not Decision-driven, and deliberations have not occurred. In addition, the plan is for scientists to be kept completely separate from the public until they have conclusions to share. Based on the above criteria, it is hoped that the agencies might be able to get the science right, but will fail on the other four criteria, largely because of the limitations associated with public participation.

The next section on the Role of Science makes clear that good science is necessary but not sufficient for risk characterization. And it is insufficient for the complex situation and long term hazards associated with radioactive wastes at West Valley.

Role of Science

Reliable technical and scientific input is essential to making sound decisions about risk. Scientific and technical experts bring indispensable substantive knowledge, methodological skills, experience, and judgment to the task of understanding risk.
But science is not necessarily neutral and objective in its ways of framing problems. Science is not necessarily neutral either, in its choices of assumptions. p.25
.... science alone can never be an adequate basis for a risk decision. p.26
Good science is a necessary—in fact, an indispensable—but not sufficient basis for good risk characterization.

The members of the public who have been asking for more public participation are also strong supporters of good science. We particularly value unbiased scientists who do not have financial conflicts of interest and those who prioritize the protection of public health and environment. Here the Academy committee provides three reasons for public participation.

p.28, Figure 1-2.

PARTICIPATION AND KNOWLEDGE IN RISK DECISIONS

In the framework we have outlined, risk characterization cannot succeed as an activity added at the end of a risk analysis, but must result from a recursive process that includes problem formulation, analysis, and deliberation. Two essential aspects of that process are appropriately broad participation by the interested and affected parties and appropriate incorporation of science.

Rationales for Participation

There are three compelling rationales for broad participation in risk decisions. They have been classified as ***normative, substantive, and instrumental*** *(Fiorino, 1990). The* ***normative*** *rationale derives from the principle that government should obtain the consent of the governed. Related to this principle is the idea that citizens have rights to participate meaningfully in public decision making and to be informed about the bases for government decisions. ... p.23*

The ***substantive rationale*** *is that relevant wisdom is not limited to scientific specialists and public officials and that participation by diverse groups and individuals will provide essential information and insights about a risk situation. As we show in detail in Chapter 2, nonspecialists may contribute substantively to risk characterization—for example, by identifying aspects of hazards needing analysis, by raising important questions of fact that scientists have not addressed, and by offering knowledge about specific conditions that can contribute more realistic assumptions for risk analyses. Nonspecialists may also help design decision processes that allow for explicit examination, consideration, and weighing of social, ethical, and political values that cannot be addressed solely by analytic techniques, but also require broadly participatory deliberation.*

The ***instrumental*** *rationale for broad public participation is that it may decrease conflict and increase acceptance of or trust in decisions by government agencies. Mistrust is often at the root of the conflicts that arise over risk analysis in the United States.....* p. 24

We have tried to avoid citing the entire book produced by the National Academy of Science. However, it represented a substantial change in the recommended approaches to involving the public in many environmental decisions that involve risk. It should be noted that the US Department of Energy and the New York State Energy Research and Development Authority have a long history of conflict over West Valley matters. They also have financial interests associated with the clean-up, potential liabilities and future site uses. As a consequence these Agencies have identified their priority as achieving consensus between themselves.

Our goals encompass the long term protection of the environment and public health and we support sound scientific analysis that addresses these goals. Too often economic and financial issues trump health and safety. We also believe that consensus cannot exist if the public and elected officials are not included. Public agencies are not supposed to function outside of the public eye. We, in fact, fund all of their activities through our taxes. At times we have advocated for West Valley funding in the budget process. It is at such times that the Agencies enjoy public involvement.

We think the Phase 1 study process requires a great deal of improvement to meet the criteria established by the National Research Council Committee, as we discussed above.

We recommend addressing all of the process problems embodied by the Committee recommendations. In addition, we recommend:

- Detailed discussion of the Characterization, Sampling and Analysis Plan with the public, SMEs and ISP. Adequate site characterization and waste characterization are important steps toward risk characterization.

- An Overview and Timeline associated with the subjects to be addressed, so that we may recommend particular experts.

- As currently constituted the Subject Matter Experts (SMEs) and the Independent Scientific Panel (ISP) are being isolated from the public and held primarily accountable to the Agencies. These Agencies have reaching consensus between themselves as their primary goal. It is a goal we support but not to the exclusion of the public.

- Financial concerns are also prominent for the Agencies. The current process does not meet the criteria identified by the National Research Council Committee that produced the report quoted here.

- Time with various subject matter experts early in the study of a particular subject and at reasonable intervals. The Independent Scientific Panel should also meet with the public at regular intervals. Agencies should not be limiting our ability to talk with experts, except for creating an orderly process, so that their time is efficiently utilized.

- Open Scientific Meetings with SMEs & ISP & Opportunity for Public Participation, so that the public is informed of topics to be discussed and could observe, with the ability to provide input at a specified time.

- There should be more balance in the Scientific Panels, so that public concerns are adequately investigated. The Agencies have largely been the ones selecting the experts. They also have control over the contracts, scopes of work and the problems to be addressed. We recommend the addition of a Public Health Expert to the Independent Scientific Panel. An appropriate selection of this expert could help address our concerns about potential underestimation of risks.

Thank you for your attention. We would much appreciate your serious consideration of our views and we hope that this would lead to a more credible scientific and public participation process. Please contact Barbara Warren for questions or clarification at 845-754-7951 or 518-462-5527.

Sincerely,

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